

Figure 1
Genetic map of the expression plasmid pYZ97

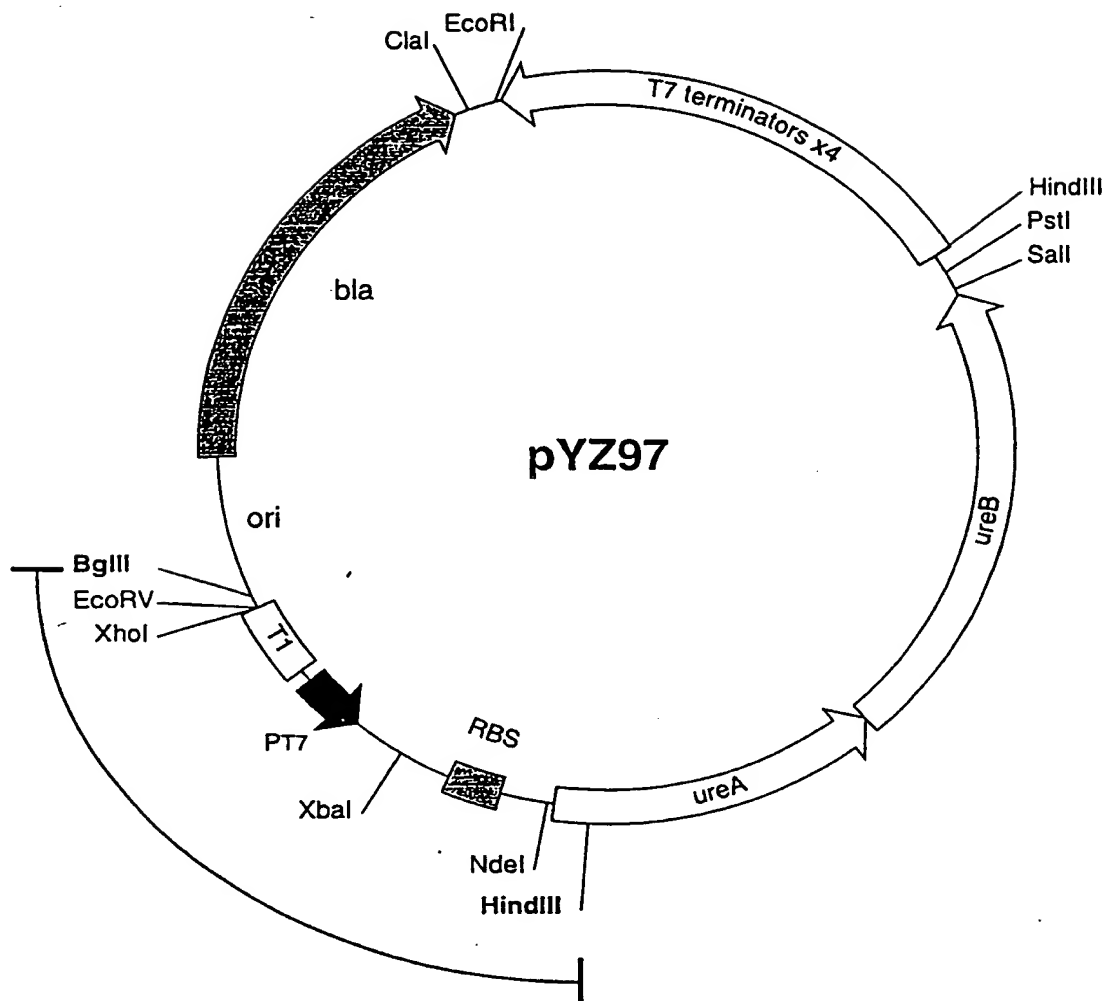


Figure 2

Nucleotide sequence of the transcriptional regulators for urease expression on plasmid pYZ97

1 AG ATC TAT GAA TCT ATG ATA TCA ACA CTC TTT TTG ATA AAT TTT CTC GAG GTA CCG AGC
BglII EcoRV XhoI

rmB T1

60 TTG AGG CAT CAA ATA AAA CGA AAG GCT CAG TCG AAA GAC TGG GCC TTT CGT TTT ATC TGT

120 TGT TTG TCG GTG AAC GCT CTC CTG AGT AGG ACA AAT CCG CCG GGA GCG GAT TTG AAC GTT

-35

180 GCG AAG CAA CGG CCC GGA GGG TGG CGG GCA GGA CGC CCG CCA TAA ACT GCC ACA AGC TCG

-10

240 GTA CCG TTG ATC TTC CTA TGG TGC ACT CTC AGT ACA ATC TGC TCT GAT GCG CTA CGT GAC

300 TGG GTC ATG GCT GCG CCC CGA CAC CCG CCA ACA CCC GCT GAC GCG CCC TGA CGG GCT TGT

360 CTG CTC CCG GCA TCC GCT TAC AGA CAA GCT GTG ACC GTC TCC GGG AGC TGC ATG TGT CAG

420 AGG TTT TCA CCG TCA TCA CCG AAA CGC GCG AGG CCC AGC GCT TCG AAC TTC TGA TAG ACT

PT7

480 TCG AAA TTA ATA CGA CTC ACT ATA GGG AGA CCA CAA CGG TTT CCC TCT AGA AAT AAT TTT
XbaI

RBS down stream box

YZ019

540 GTT TAA CTT TAA GAA GGA GAT ATA CAT ATG AAA CTG ACT CCC AAA GAG TTA GAC AAG TTG
Met Lys Leu Thr Pro Lys Glu Leu Asp Lys Leu

600 ATG CTC CAC TAC GCT GGA GAA TTG GCT AAA AAA CGC AAA GAA AAA GGC ATT AAG CTT
Met Leu His Tyr Ala Gly Glu Leu Ala Lys Lys Arg Lys Glu Lys Gly Ile Lys Leu

Figure 3

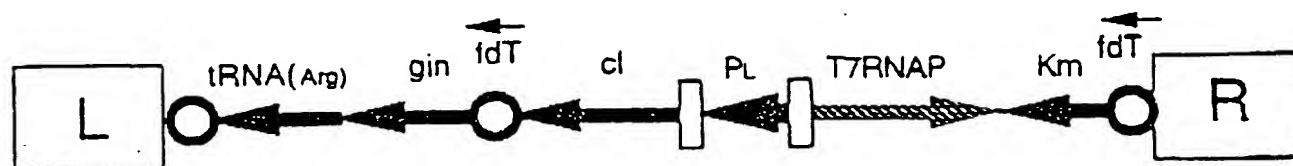
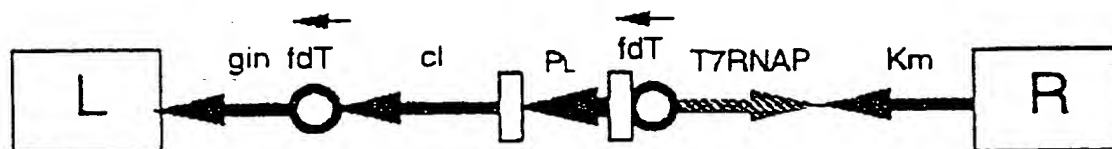
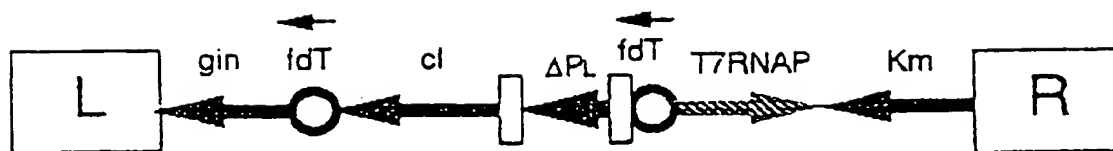
**pYZ88** (high expression)**pYZ84** (medium expression)**pYZ114** (low expression)

Figure 4

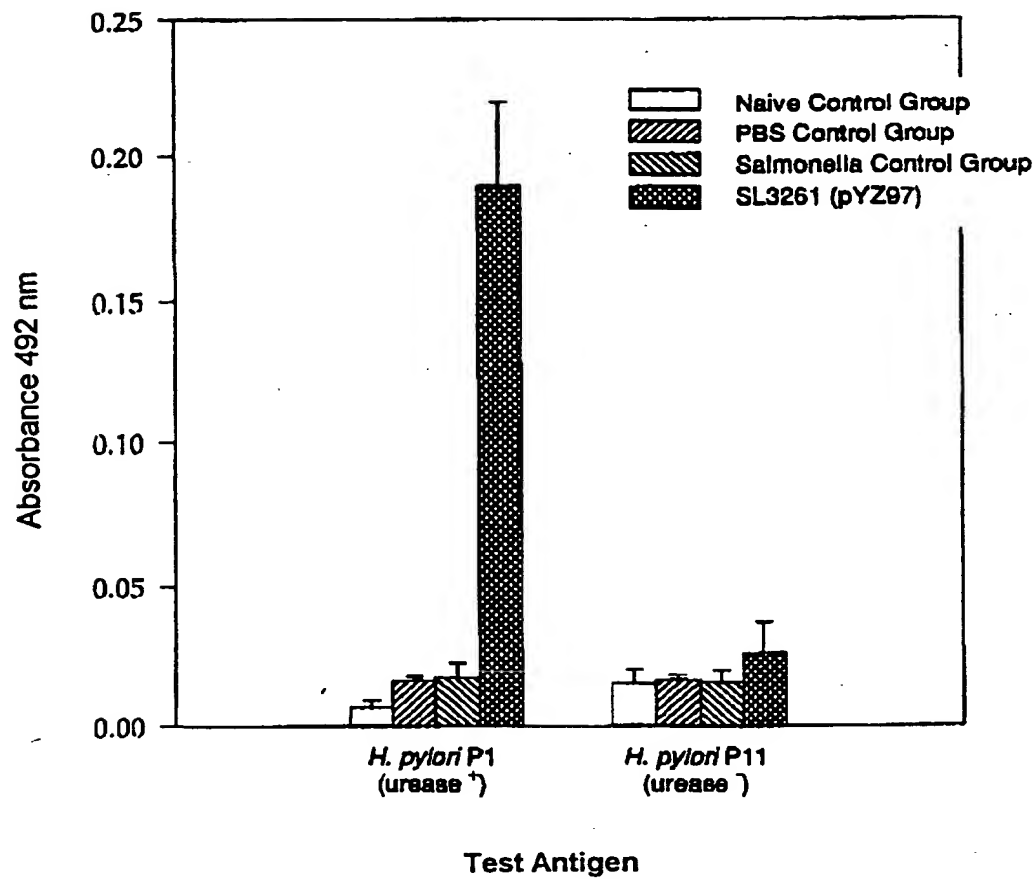
ELISA for anti-*H. pylori* IgA antibodies in intestinal fluids of vaccinated mice

Figure 5

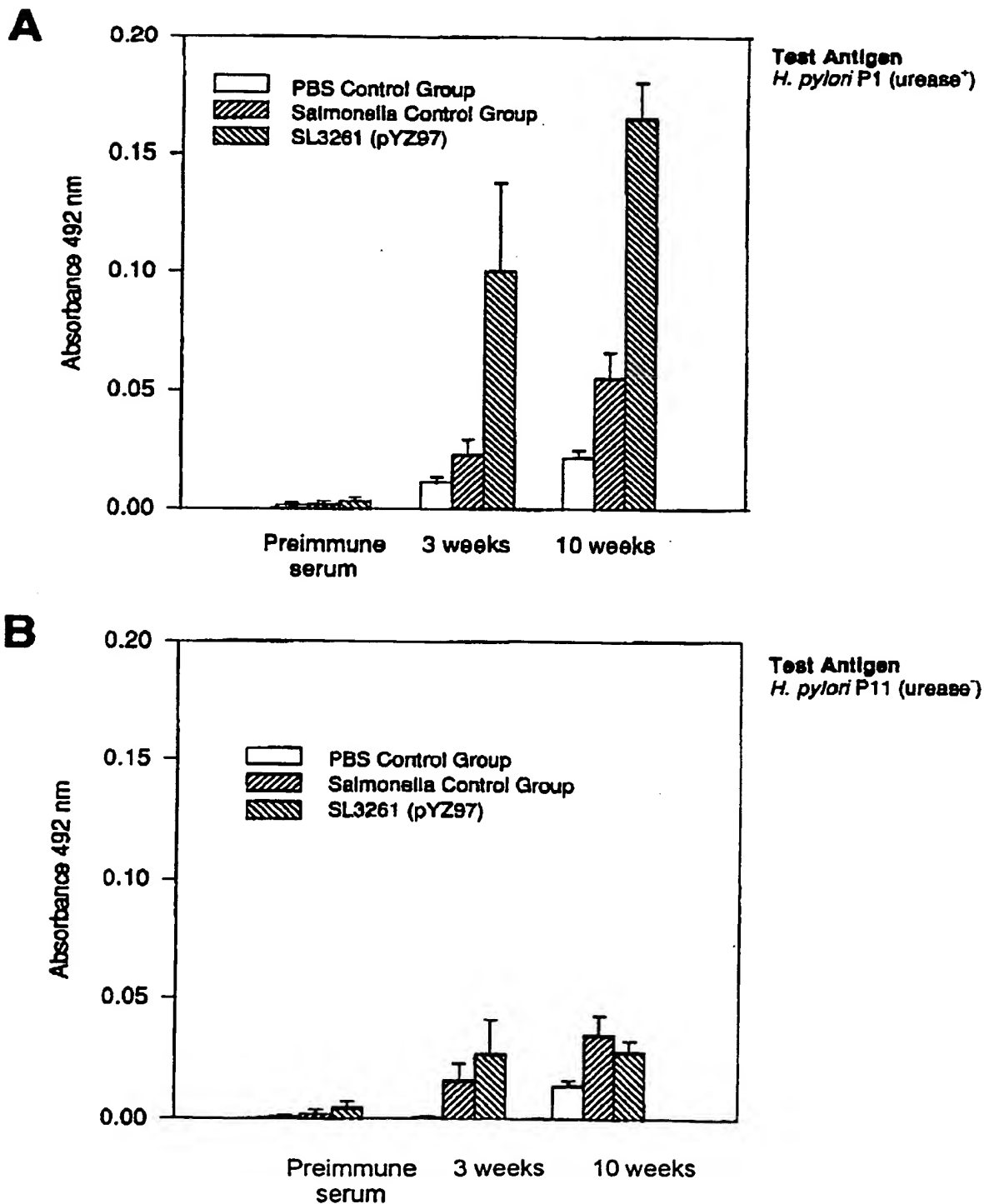
ELISA for anti-*H. pylori* IgA antibodies in serum of vaccinated mice

Figure 6
Urease activity in stomach tissue of vaccinated mice after *H. pylori* challenge.

